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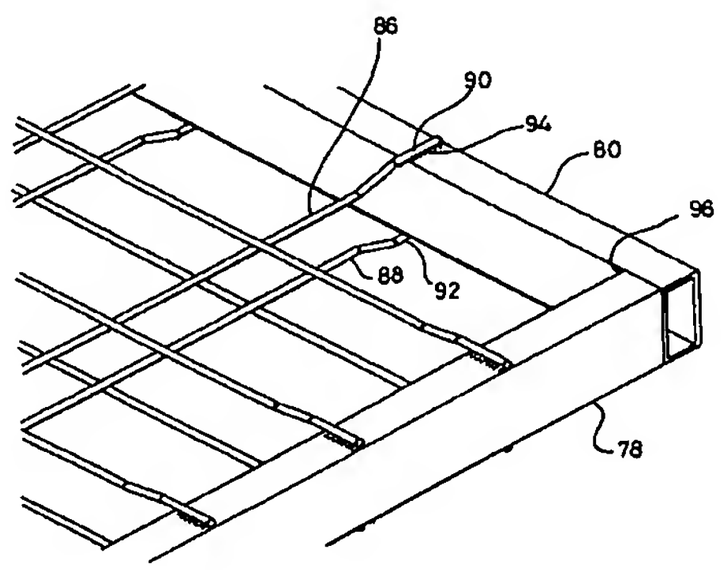
(54) Title: IMPROVEMENTS IN AND RELATING TO SIFTING SCREENS



(57) Abstract: A frame over which woven wire mesh is to be stretched and secured to form a sieving screen and which can be used to screen solids from drilling mud recovered from downhole when drilling for oil or gas. The frame comprises a rectilinear moulded plastic frame having edge regions by which it is secured in place in a shaker. Within the frame is a plurality of rectilinear windows formed by an orthogonal array of interesting ribs also of moulded plastics material. Some of the ribs are internally reinforced by a structure comprising two spaced apart layers of orthogonal intersecting spaced apart wires, running parallel to the length and breadth of the rectilinear shape of the frame within the ribs to increase their rigidity. The edge regions of the frame are reinforced internally by metal box-section members joined at their four corners and defining perimeter reinforcement, and the ends of the wires are secured to the box-section members. The latter are encapsulated in the same plastics material from which the orthogonal array of intersecting ribs are moulded. Alternate ribs are not reinforced with wires, and the non-reinforced ribs only extend partway between the upper and lower faces of the frame. Lengths of wire bent to form spacers and adapted to fit between upper and lower wires of the rib reinforcing structure, are joined to the upper and lower wires so as to extend therebetween and maintain the desired separation of the two layers of wires during the plastics encapsulation/moulding process.

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